in active sectors. There are only three records of American divisions being in an active sector without artillery support. The total of these three cases amounts to one-half of 1 per cent, or about 14 hours out of the typical 100 days just analyzed.

The most significant facts about our artillery in France are presented in summary in Table 6, which takes into account only light and heavy field artillery and does not include either the small 37 mm. guns or the trench mortars.

## TABLE 6 .- American Artillery in France-Summary.

Total pieces of artillery received to November 11	3,499
Number of American manufacture	477
American-made pieces used in battle	130
Artillery on firing line	
Rounds of artillery ammunition expended	8,850,000
Rounds of ammunition of American manufacture expended	208,327
Rounds of American-made ammunition expended in battle	8,400

The facts of the table can be summarized in round numbers with approximate accuracy by saying that we had in France 3,500 pieces of artillery, of which nearly 500 were made in America, and we used on the firing line 2,250 pieces, of which over 100 were made in America.

## GUNS NEEDED VS. GUNS AVAILABLE

Diagram 33 shows the degree of balance which existed each month throughout the war between the men under arms and the artillery that was available for them. The number of men in the entire American Army is shown by the upper black ribbon, and the number of these who were in France is shown by the lower black-barred ribbon.

The upper white ribbon shows the size of army that could have been fully equipped each month with the pieces of light artillery, consisting of 75 mm. and 3-inch field guns, that were then actually available. If the supply had been fully ample this line would run somewhat above the upper black ribbon, to allow for an adequate reserve and for the retirement of the less satisfactory types of guns. Actually the white ribbon runs below the black one from September, 1917, to Sep-